Appl. No. 09/685,154 February 6, 2004 Amendment Dated September 10, 2003

Reply to OfficeAction of:

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-17. (canceled)

- (previously presented) A pressure transducer, including: 18.
 - (A) a shell;
 - (B) a pressure sensor disposed in the shell;
- (C) a heater attached to the shell, the heater including a first heating element and a second heating element, the first heating element being characterized by a first electrical resistance, the second heating element being characterized by a second electrical resistance;
- (D) one or more electronic components for applying an electrical signal to the heater, the heater generating heat in response to the electrical signal; and
- (E) a switching element for selectively connecting any of: (1) the first and second heating elements in series with the electronic components; (2) the first heating element in series with the electronic components; (3) the second heating elements in series with the electronic components and (4) the first and second heating elements in parallel with the electronic components.
- 19. (original) A transducer according to claim 18, wherein the first electrical resistance is equal to the second electrical resistance.
- 20. (original) A transducer according to claim 18, wherein the first electrical resistance is different than the second electrical resistance.
- 21. (canceled)

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- 22. (previously presented) A pressure transducer, including:
 - (A) a pressure sensor;
- (B) a heated shell disposed around the sensor, the heated shell including a first heating element and a second heating element, the first heating element being characterized by a first electrical resistance, the second heating element being characterized by a second electrical resistance;
- (C) one or more electronic components for applying an electrical signal to the heated shell, the heated shell generating heat in response to the electrical signal; and
- (D) a switching element for selectively connecting any of: (1) the first and second heating elements in series with the electronic components; (2) the first heating element in series with the electronic components; (3) the second heating elements in series with the electronic components and (4) the first and second heating elements in parallel with the electronic components.
- 23. (original) A transducer according to claim 22, wherein the first electrical resistance is equal to the second electrical resistance.
- 24. (original) A transducer according to claim 22, wherein the first electrical resistance is different than the second electrical resistance.

25-28. (canceled)

- 29. (previously presented) A transducer according to claim 18, further including an outer housing disposed around the shell.
- 30. (currently amended) A transducer according to claim 29, wherein the heater is disposed between the outer metallie housing and the shell.

31-32. (canceled)

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33. (previously presented) A transducer according to claim 22, further including an outer housing disposed around the heated shell.

34. (canceled)

- 35. (new) A method of heating a pressure transducer, comprising:
- (A) providing a pressure transducer including a shell, a pressure sensor disposed within the shell, a heater coupled to the shell, the heater including a first resistive heating element and a second resistive heating element, the pressure transducer further including one or more electronic components for supplying power to the heater;
- (B) during a first time interval, connecting the one or more electronic components to a first configuration of the first and second resistive heating elements, the first configuration providing a first electrical resistance; and
- (C) during a second time interval, after the first time interval, connecting the one or more electronic components to a second configuration of the first and second resistive heating elements, the second configuration providing a second electrical resistance, the second electrical resistance being different from the first electrical resistance.
- 36. (new) A method according to claim 35, at least one of the first and second configurations having the first and second resistive heating elements connected in series.
- 37. (new) A method according to claim 35, at least one of the first and second configurations having the first and second resistive heating elements connected in parallel.
- 38. (new) A method according to claim 35, including:

applying power from the one or more electronic components to both the first and second resistive heating elements during one of the first and second time intervals; and

applying power from the one or more electronic components to only one of the resistive heating elements during another of the first and second time intervals.

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39. (new) A method according to claim 35, further comprising sensing a pressure using a pressure-sensitive diaphragm in the pressure sensor.

- 40. (new) A method according to claim 35, further comprising increasing a temperature of the shell from a first ambient temperature to a second temperature, greater than the first ambient temperature, and operating the pressure transducer with the shell substantially at the second temperature.
- 41. (new) A method according to claim 35, further comprising operating the pressure transducer at a first temperature during the first time interval, and operating the pressure transducer at a second temperature during the second time interval, the second temperature being different from the first temperature.
- 42. (new) A method according to claim 35, further comprising providing an outer housing disposed around the shell.
- 43. (new) A method according to claim 42, disposing the heater between the shell and the outer housing.
- 44. (new) A method of heating a pressure transducer, comprising:
- (A) providing a pressure transducer including a shell, a pressure sensor disposed within the shell, and a heater coupled to the shell, the heater including a first resistive heating element and a second resistive heating element, the pressure transducer further including one or more electronic components for supplying power to the heater;
- (B) connecting the first and second resistive heating elements to the one or more electronic components in a first electrical configuration that provides power to both the first and second resistive heating elements, the heater when in the first electrical configuration providing a first electrical resistance; and
- (C) connecting the first and second resistive heating elements to the one or more electronic components in a second electrical configuration that provides power to both the first

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and second resistive heating elements, the heater when in the second electrical configuration providing a second electrical resistance, the second electrical resistance being different from the first electrical resistance.

- 45. (new) A method according to claim 44, the first electrical configuration being a series configuration.
- 46. (new) A method according to claim 44, the first electrical configuration being a parallel configuration.
- 47. (new) A method according to claim 44, further comprising connecting the first and second resistive heating elements in the first electrical configuration for a first time interval.
- 48. (new) A method according to claim 44, further comprising connecting the first and second resistive heating elements in the second electrical configuration for a second time interval.
- 49. (new) A method according to claim 44, further comprising increasing a temperature of the shell from a first ambient temperature to a second temperature, greater than the first ambient temperature, and operating the pressure transducer with the shell substantially at the second temperature.
- 50. (new) A method according to claim 44, further comprising operating the pressure transducer at a first temperature during the first time interval, and operating the pressure transducer at a second temperature during the second time interval, the second temperature being different from the first temperature.